

## **ABSTRACT OF THE DISCLOSURE**

Disclosed is a method and apparatus for stacking dice including multi-chip packaging with additional non stacked dice. The stacked dice have at least one  
5 electrical connection located on a single surface and oriented in the same direction when stacked. These dice are stacked, offset and coupled electrically. In an embodiment, the stacked dice have a buffer function, such as an SDRAM device, and are included in a multi-chip package (MCP) with an additional die including a channel function and a controller function thereon. The dice are packaged in a  
10 single package for placement on a printed circuit board for use in a storage device such as a disc drive.